

Phone: 785-296-1535 Fax: 785-296-8464 www.kdheks.gov

Robert Moser, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

May 23, 2014

Mr. Paul Roemerman U.S. EPA Region VII, Superfund Division 11201 Renner Boulevard Lenexa, Kansas 66219

RE: Electronic Documents for the Standard Products/West Kellogg Site, Wichita, Sedgwick County,

Kansas

KDHE I.D. # C2-087-72515 EPA I.D. # KSN000706571

Dear Mr. Roemerman:

Enclosed are the electronic documents for the Preliminary Assessment of the Standard Products/West Kellogg site in Wichita, Sedgwick County, Kansas. If you have any questions, please feel free to contact me at (785) 296-8065.

Sincerely,

Randolph L. Brown, P.G.

Unit Chief, Site Assessment Unit

Remedial Section

Bureau of Environmental Remediation

rlb/Attachments

c: Site File -> C2-087-72515

Site Decision Files

40473789 Superfund 1.0

ES

Kansas Department of Health and Environment

Preliminary Assessment



Standard Products/ West Kellogg Wichita, Kansas (C2-087-72515)

Bureau of Environmental Remediation

Our Mission: To protect and improve the health and environment of all Kansans

Preliminary Assessment

Standard Products/West Kellogg Site

Wichita, Kansas

Prepared by:
Kansas Department of Health and Environment
Bureau of Environmental Remediation
Remedial Section
Site Assessment Program

Date: March 2014

State ID: C2-087-72515 EPA ID: KSN000706571

Project Manager: Jon Vopata, Environmental Scientist III

Field Team Members:

Mike LaBuda, Environmental Technician IV

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SITE INFORMATION	1
2.1 2.2 2.3	SITE LOCATION AND DESCRIPTION	1
3.0	ASSESSMENT ACTIVITIES	2
3.1 3.2 3.3 3.4	GROUNDWATER SAMPLE COLLECTIONSOIL SAMPLE COLLECTION	2 2
4.0	GROUNDWATER PATHWAY	3
4.1 4.2 4.3	SITE GEOLOGYGROUNDWATER TARGETSGROUNDWATER PATHWAY CONCLUSIONS	4
5.0	SURFACE WATER PATHWAY	5
5.1 5.2 5.3	HYDROLOGIC SETTINGS	5
6.0	SOIL EXPOSURE AND AIR PATHWAYS	6
6.1 6.2 6.3	PHYSICAL CONDITIONS	6
7.0	SUMMARY AND CONCLUSIONS	6
8.0	REFERENCES	8
9.0	APPENDICES	9
	Appendix 9.1 Figures and Tables Appendix 9.2 Site Photos Appendix 9.3 Analytical Data Appendix 9.4 Field Notes	

1.0 Introduction

This document presents the findings of a Preliminary Assessment (PA) conducted by the Kansas Department of Health and Environment (KDHE) at the Standard Products/West Kellogg site in Wichita, Kansas. The assessment was conducted as part of continuing cooperative agreement with the United States Environmental Protection Agency (EPA) to perform investigations of selected sites to evaluate potential or actual releases of hazardous substances, pollutants, or contaminants in Kansas. These investigations are performed under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 and consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) 40 CFR § 300.400-300.425.

This PA was initiated by the KDHE Bureau of Environmental Remediation in response to the discovery of tetrachloroethylene (PCE) in groundwater. The purpose of this PA is to determine the source of contaminants, collect sufficient information to assess the threat posed to human health and the environment, and to determine the need for further action under CERCLA/SARA consistent with the NCP. The investigation included the collection of water samples from drinking water wells and evaluation of the site using the Hazard Ranking System (HRS) guidance. The Standard Products/West Kellogg site has the EPA ID #KSN000706571.

2.0 Site Information

2.1 Site Location and Description

The Standard Products/West Kellogg site is located at 7920 W. Kellogg Street in Wichita, Sedgwick County, Kansas. The property is within the northeast quarter of Section 28, Township 27 South, Range 1 West. The geographical coordinates for the property are latitude 37.673344° North, longitude -97.433751° West. Surrounding properties include commercial businesses to the west, east, and south, and residences to the northwest.

2.2 Site Background

In December 2009 KDHE conducted a Unified Focused Assessment (UFA) of the Standard Products/West Kellogg site. The UFA was conducted through an initiative to assess former radium dial shop sites in Kansas. Groundwater samples were collected from two locations on the property. The background sample (SP-2) to the north indicated PCE at 8.1 micrograms per liter (ug/L), slightly exceeding the EPA maximum contaminant level (MCL) and KDHE Tier 2 Risk-based Standards for Kansas (RSK) level of 5 ug/L. No other contaminants were identified at concentrations exceeding MCLs or RSK. Radium-226 was not detected above background levels.

In March 2013 KDHE conducted a Site Evaluation of the Standard Products/West Kellogg site. Groundwater samples were collected from seven locations upgradient (northwest) of the subject property. One sample collected upgradient of the subject property (SE-5) indicated PCE at 7.4 ug/L, exceeding MCL and RSK (Reference 1).

2.3 Hazardous Substance Characteristics

Along with dry cleaning and parts degreasing, PCE has additional applications in making other chemicals and in some consumer products. Exposure to high doses can cause dizziness, headaches, sleepiness, confusion, nausea, difficulty in speaking and walking, unconsciousness, and death. Kidney and liver damage can also result from high exposures. PCE is reasonably assumed to be a carcinogen. Humans can generally detect PCE at concentrations of one part per million in air. PCE is nonflammable at room temperature, evaporates easily, and has a sharp, sweet odor (Reference 2).

3.0 Assessment Activities

3.1 Groundwater Sample Collection

On February 19-20, 2014, Mike LaBuda of KDHE conducted a door-to-door survey of residential properties from the intersection of Topaz and University north-northwest to the intersection of Tyler and Central. Figure 4 depicts the approximately 75 residential properties surveyed. During the survey Mr. LaBuda identified and sampled three drinking water wells (Monroe residence at 131 N. Socora, Anderson residence at 143 N. Evergreen, and Stover residence at 142 N. Evergreen). Residents along Robin, Evergreen, and Socora indicated to Mr. LaBuda that there were no public water supply lines on these streets and residents in the area primarily relied on domestic wells for drinking water. On February 25, 2014, Kyle Parker sampled three additional drinking water wells in the survey area (Emprise Bank Trust residence at 261 N. Robin, Nibarger residence at 241 N. Robin, and Brown residence at 215 S. Socora).

The drinking water well samples were collected from spigots on the outside of the houses after allowing the spigots to flow for approximately five minutes. Water samples were collected directly into acidified 40 milliliter vials under low flow conditions. Samples were transported to Kansas Department of Health and Environmental Laboratories for analysis of volatile organic compounds by EPA method 8260.

3.2 Soil Sample Collection

No soil samples were collected during the PA.

3.3 Analytical Results

PCE was reported in drinking water well samples collected from 143 N. Evergreen, 142 N. Evergreen, 241 N. Robin, and 215 S. Socora at concentrations of 554.4 ug/L, 182.4

ug/L, 8.0 ug/L, and 1.5 ug/L, respectively. PCE was not detected in groundwater samples collected at 131 N. Socora or 261 N. Robin. The samples collected from 143 N. Evergreen, 142 N. Evergreen, and 241 N. Robin exceeded both the MCL and RSK for PCE.

Trichloroethylene (TCE) was reported in drinking water well samples collected from 143 N. Evergreen and 142 N. Evergreen at concentrations of 19.3 ug/L and 1.0 ug/L, respectively. TCE was not detected in groundwater samples collected at 131 N. Socora, 261 N. Robin, 241 N. Robin, or 215 S. Socora. The sample collected from 143 N. Evergreen exceeded both the MCL and RSK for TCE.

Cis 1,2-Dichloroethylene (cis 1,2-DCE) was reported in drinking water well samples collected from 143 N. Evergreen and 142 N. Evergreen at concentrations of 19 ug/L and 0.9 ug/L, respectively. Cis 1,2-DCE was not detected in groundwater samples collected at 131 N. Socora, 261 N. Robin, 241 N. Robin, or 215 S. Socora. All reported concentrations of cis 1,2-DCE were below MCL and RSK.

Chloroform was reported in the drinking water well sample collected from 142 N. Evergreen at a concentration of 0.9 ug/L, below the MCL and RSK. Chloroform was not reported in any other drinking water well samples.

Methyl Tert-Butyl Ether (MTBE) was reported in the drinking water well sample collected from 143 N. Evergreen at a concentration of 1.7 ug/L, below the MCL and RSK. MTBE was not reported in any other drinking water well samples.

Water sample results are summarized in Table 1 and Figure 4.

3.4 Quality Assurance Procedures

A Quality Assurance Project Plan (QAPP) was developed for the site by completing a site-specific addendum to the Site Assessment Program's generic QAPP. All samples were collected in accordance with appropriate standard operating procedures.

4.0 Groundwater Pathway

4.1 Site Geology

The site is located within the Arkansas River Lowlands section of the Central Lowland Physiographic Province. The topography of the province is characterized by the broad, flat valley of the Arkansas River and the gently rolling slopes that rise to the uplands adjacent to the valley (Reference 3).

Soil at the property is classified as Canadian complex. This complex consists of deep, well drained, moderately rapidly permeable soils on alluvial terraces. The silt loam soils

(slopes ranging zero to three percent) are well-drained soils occurring in floodplains formed from alluvial parent material (Reference 3).

The site is near the center of the broad 4-mile wide alluvial valley of the Arkansas River. This alluvial valley is comprised of unconsolidated sediments-terrace deposits of Illinoisan age of the Pleistocene epoch. The unconsolidated sediments consist of bedded sand, silt, and clay deposits of varying thickness and composition. The unconsolidated deposits are underlain by shale bedrock of the Wellington Formation (Permian age). The unconsolidated deposits/Wellington Formation contact is approximately 150 feet below ground surface (bgs) (Reference 4).

The terrace deposits of unconsolidated sediment within the Arkansas River valley make up the principal aquifer of the site. Groundwater is generally encountered at 30 feet bgs. Groundwater flow direction is south-southeast. The less permeable Wellington Formation is the lower boundary of the alluvial aquifer (Reference 4).

4.2 Groundwater Targets

The groundwater exposure pathway under the HRS is evaluated in part by calculating the number of residents, students, and workers served by water wells located within four miles of the site and determining whether these people are actually or potentially exposed to hazardous substances (Reference 5).

Water well surveys were distributed to approximately 75 residences; only 6 residences responded. The six responding residences are not connected to a public water supply and rely on private wells for drinking water. Residents surveyed indicated the properties along Robin, Evergreen, and Socora are on private drinking water wells. Residents along other streets may also be drinking water from private wells.

The water well survey and drinking water results identified ten Level I drinking water targets and four Level II drinking water targets.

A search of the Kansas Geological Survey water well record (form WWC-5) database identified: 171 domestic wells within a quarter mile of the site, 256 domestic wells between one quarter mile and one half mile from the site, 423 domestic wells between one half mile and one mile from the site, 1,634 domestic wells between one and two miles from the site, 2,806 domestic wells between two and three miles from the site, and 3,942 domestic wells between three and four miles from the site. This estimate of groundwater targets is limited by the WWC-5 database, which only contains records of wells drilled since 1975 (Reference 6).

The KDHE Public Water Supply (PWS) database identified: zero PWS wells within two miles of the site, four City of Goddard PWS wells serving an estimated population of 4,532 located between two and three miles from the site, two Sedgwick County Rural Water District #4 wells serving an estimated population of 1,626 located between two and three miles from the site, one Eberly Farm, Inc., well serving an estimated population

of 200 located between three and four miles from the site, two Occidental Chemical Corporation wells serving an estimated population of 190 located between three and four miles from the site, one Dusti's Place LLC well serving an estimated population of 65 located between three and four miles from the site, and three City of Wichita PWS wells serving an estimated population of 19,712 located between three and four miles from the site (Reference 7).

City of Wichita 2012 census data indicates the population of Wichita is 385,577 persons. There are an estimated 2.49 persons per household. The estimated population density is 2,400 people per square mile. The total distance-weighted population of potential groundwater contamination targets within four miles of the site is calculated to be approximately 5,736 (Reference 5, 8).

4.3 Groundwater Pathway Conclusions

The groundwater pathway is the primary pathway of concern. There have been ten Level I drinking water targets, four Level II drinking water targets, and 5,736 potential (distance-weighted) drinking water targets identified. There are potentially impacted private wells identified within the area of groundwater contamination that should be sampled during the Site Inspection (SI).

5.0 Surface Water Pathway

5.1 Hydrologic Settings

The site is located approximately 1.5 miles west of the Wichita Valley Center Flood Control Canal and approximately four miles west of the Arkansas River. Overland drainage is controlled by curbs and gutters that direct drainage to a municipal storm sewer.

No probable point of entry to the Arkansas River was established for this assessment because the overland flow segment of the HRS surface water pathway does not appear to be a threat.

5.2 Surface Water Targets

The surface water exposure pathway under HRS is evaluated in part by calculating the number of residents, students, and workers served by surface water intakes within 15 miles downstream of the site and whether these people are actually or potentially exposed to hazardous substances. No drinking water intakes were identified within 15 miles downstream of the site.

The Arkansas River is used for recreational fishing. Numerous wetlands are within 15 miles downstream of the site. No other sensitive environments were identified.

5.3 Surface Water Pathway Conclusions

There are no indications of a release of PCE to surface water at the site. Given the location of the site relative to the Arkansas River and the migration pathway of the PCE contaminated groundwater, contaminated groundwater flow into the Arkansas River is unlikely.

6.0 Soil Exposure and Air Pathways

6.1 Physical Conditions

Properties upgradient (northwest) of 7920 W. Kellogg are primarily residential. There are commercial properties located around W. Central Avenue and N. Tyler Road approximately 1.5 miles north-northwest.

6.2 Soil Exposure and Air Pathway Targets

The soil exposure pathway under HRS assesses the risks associated with existing surficial contamination (0-2 feet below surface) at properties on which people live or work. No soil samples were collected during the assessment of the site. The outdoor air exposure pathway is considered low due to the degradation and rapid dispersion of PCE in the atmosphere. There is a potential for indoor air exposure via vapor intrusion from contaminated soil or groundwater.

6.3 Soil Exposure and Air Pathway Conclusions

The soil exposure and air pathways appear to pose a minimal threat at the site. The air pathway under HRS addresses outside air only, but indoor air contamination from vapor intrusion of contaminated soil and groundwater may be impacting residential properties.

7.0 Summary and Conclusions

In December 2009 KDHE conducted a UFA of the Standard Products/West Kellogg site. PCE was detected at concentrations slightly exceeding the MCL and RSK in groundwater samples collected at 7920 W. Kellogg Street. Radium-226 was not detected above background levels.

In March 2013 KDHE conducted a SE at the Standard Products/West Kellogg site. PCE was detected above the MCL and RSK in one groundwater sample collected at the intersection of Topaz and University Street.

In February 2014 Mike LaBuda conducted a door-to-door survey of residential properties from the intersection of Topaz and University north-northwest to the intersection of Tyler and Central. During the survey six drinking water wells were identified and sampled.

PCE was detected in four drinking water wells; three drinking water wells exceeded the MCL and RSK for PCE. TCE was detected in two drinking water wells; one drinking water well exceeded the MCL and RSK for TCE. The survey and analytical results identified ten level one drinking water targets and four level two drinking water targets.

Residents surveyed indicated properties along Robin, Evergreen, and Socora use private drinking water wells. Residents along other streets may also be drinking water from private wells.

PCE and TCE have been detected in drinking water wells at concentrations exceeding the MCL and RSK levels. The source(s) of contamination have not been identified and there are likely additional impacted drinking water wells. Therefore, a higher-priority SI consistent with §300 of the NCP is recommended for the Standard Products/West Kellogg site.

8.0 References

- (1) Kansas Department of Health and Environment, Bureau of Environmental Remediation, Remedial Section. Standard Products/West Kellogg site file, C2-087-72515. January 2014.
- (2) Agency for Toxic Substances and Disease Registry. Accessed February 18, 2014 from http://www.atsdr.cdc.gov/
- (3) United States Department of Agriculture Soil Conservation Service, in cooperation with Kansas Agricultural Experiment Station. *Soil Survey of Sedgwick County, Kansas.* 1979.
- (4) Lane, C.W., and Miller, D.E. *Geohydrology of Sedgwick County, Kansas*, Bulletin 176, Kansas Geological Survey, University of Kansas Publications; Lawrence, Kansas. 1965.
- (5) United States Environmental Protection Agency, November 1992, The Hazard Ranking System Guidance Manual, Publication 9345.1-07.
- (6) Water well completion records form, WWC-5, available at: http://www.kgs.ku.edu/. Accessed February 2014.
- (7) Kansas Department of Health and Environment, Bureau of Water, Public Water Supply (PWS) Database. Accessed internally February 2014.
- (8) United States Census Bureau. *City of Wichita Quickfacts from the U.S. Census Bureau*. Retrieved February 2014 from http://quickfacts.census.gov/qfd/states/20/2079000.html

9.0 Appendices

9.1 Figures and Tables

Table 1: Standard Products/West Kellogg - Analytical Results Project Phase: Preliminary Assessment Standard Products/West Kellogg - Wichita, KS KDHE Project Code: C2-087-72515

Property	Address	Date Collected	Tetra- chloro- ethylene (PCE)	Tri- chloro- ethylene (TCE)	cis 1,2- Dichloro- ethylene (cis 1,2-DCE)	Chloro- form	Methyl tert-Butyl Ether (MTBE)	Number of Residents Drinking Water
RSK: GW P	athway / EPA: MO	CL	5.0 / 5.0	5.0 / 5.0	70 / 70	80 / 80	133 / NE	
Monroe Residence	131 N. Socora	2/19/14	<0.5	<0.5	<0.5	<0.5	<0.5	3
Anderson Residence	143 N. Evergreen	2/19/14	554	19.3	19.0	<0.5	1.7	5
Stover Residence	142 N. Evergreen	2/19/14	182	1.0	0.9	0.9	<0.5	3
Emprise Bank Trust	261 N. Robin	2/25/14	<0.5	<0.5	<0.5	<0.5	<0.5	2
Nibarger Residence	241 N. Robin	2/25/14	8.0	<0.5	<0.5	<0.5	<0.5	2
Brown Residence	215 S. Socora	2/25/14	1.5	<0.5	<0.5	<0.5	<0.5	4

Notes: All concentrations provided in micrograms per liter (ug/L)

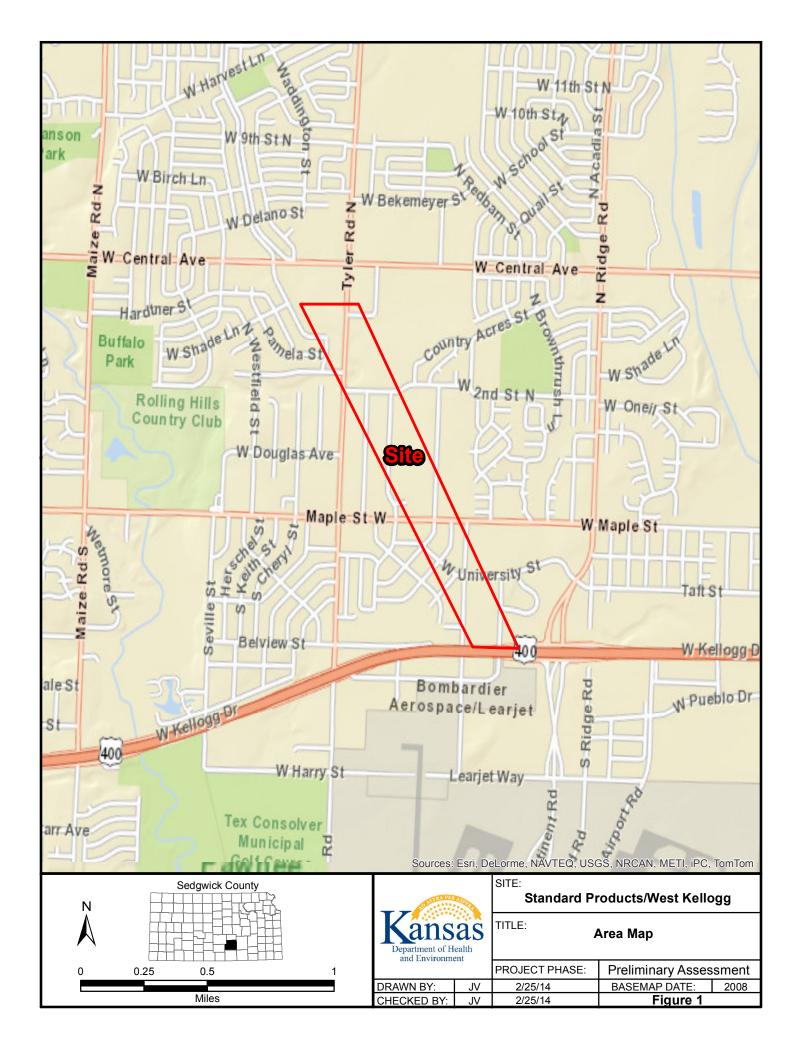
RSK Residential Risk-based Standards for Kansas

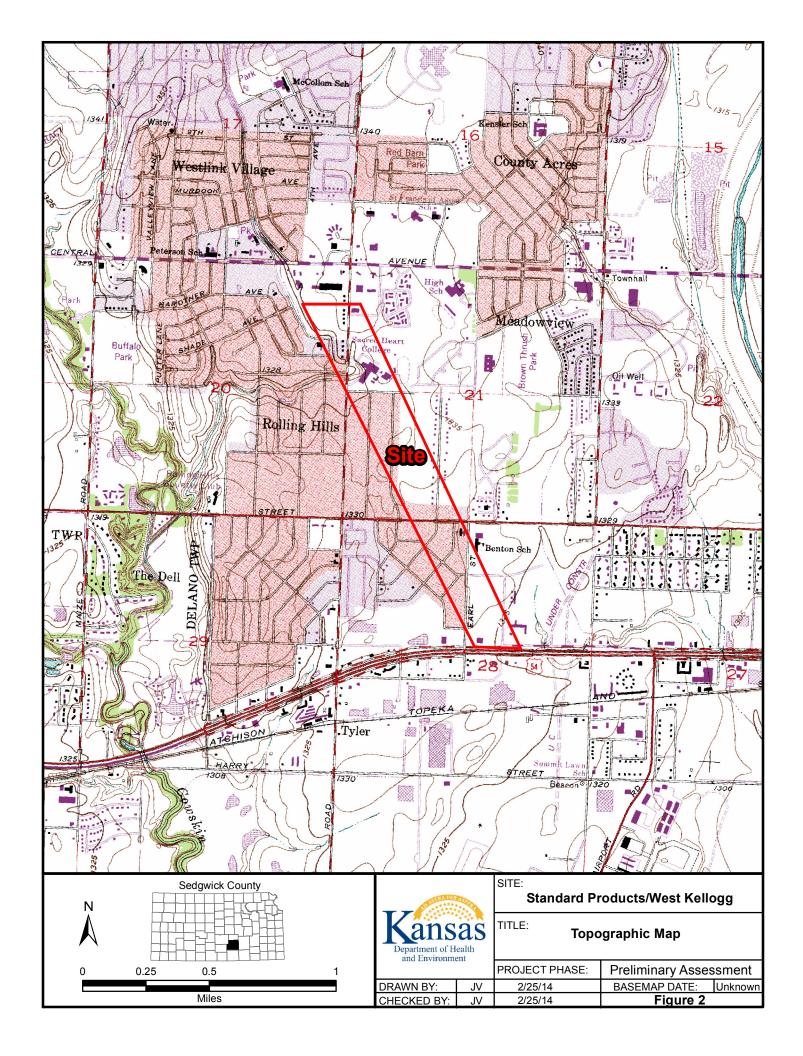
EPA: MCL - Environmental Protection Agency; Maximum Contaminant Level

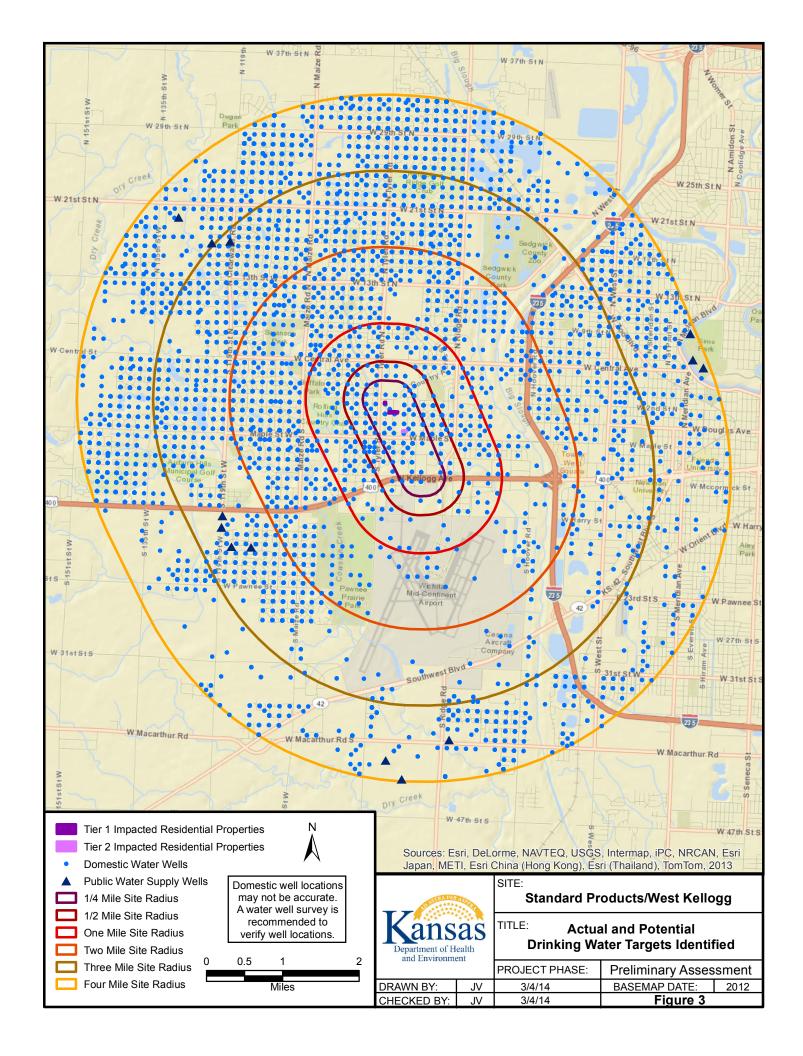
NE - Not Established

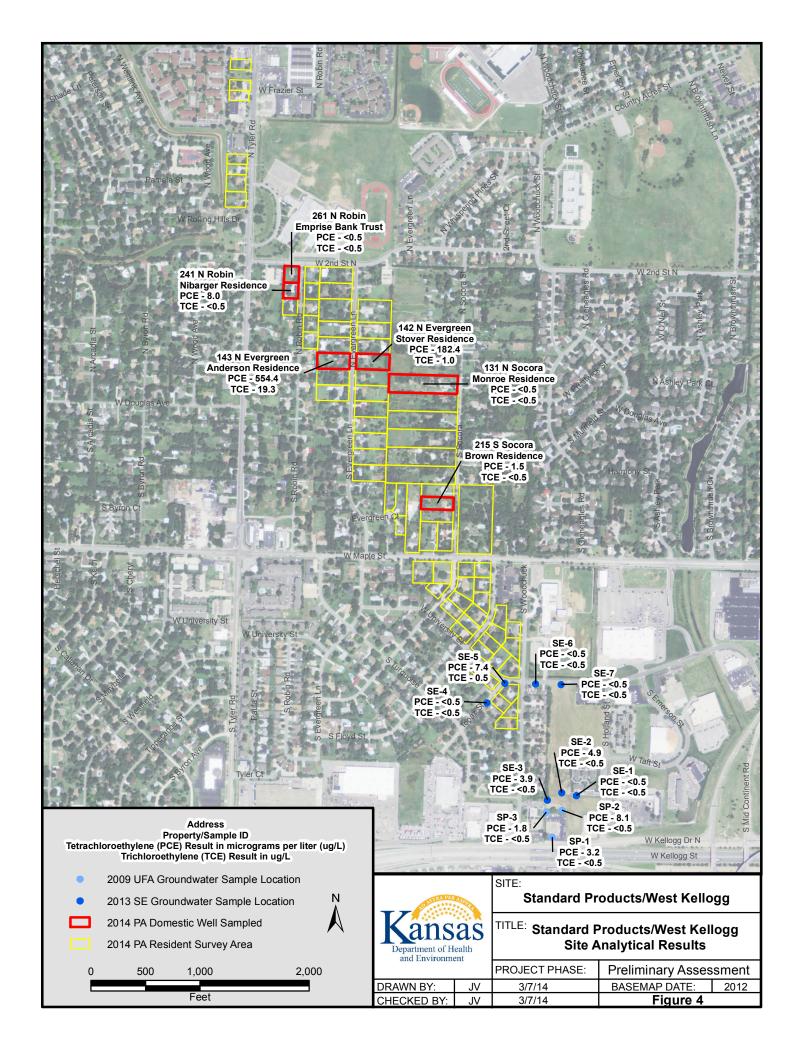
Bold values exceed RSK and MCL

Analytical results reported by Kansas Department of Health and Environmental Laboratories









9.2 Site Photos

Photo # 1



Viewing Direction: W

Caption:

Property at 131 N. Socora.

Photo # 2



Viewing Direction: $\ \ \, \exists \ \ \,$

Caption:

Property at 142 N. Evergreen.

Photo # 3

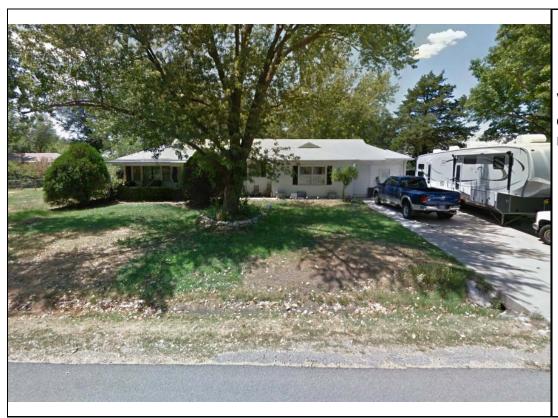


Viewing Direction: W

Caption:

Property at 143 N. Evergreen.

Photo # 4



Viewing Direction: W

Caption:

Property at 241 N. Robin.

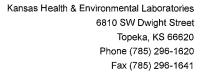
Photo # 5



Viewing Direction: W
Caption:

Property at 261 N. Robin.

9.3 Analytical Data





Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Mike LaBuda

Lab ID:

64737

Matrix:

Water

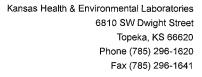
Sample ID: Monroe Res Description	siderice	P 7/ 5 1/2	, Sono	a n. g				9/2014 1/2014		
Parameters	Results	Units	RDL	DF	Prep	Ву	Analyzed	Ву	Qual	l RegLm
Volatiles by EPA 8260										
Analysis Desc: EPA 8260			Prepara	tion Method: EPA 8260	,					
			Analytic	al Method: EPA 8260						
Trichlorofluoromethane	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	A 2/27/2014 00:17	MJA		
Chloroform	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
MTBE	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
Bromochloromethane	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
cis-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
trans-1,3-Dichloropropene	<0.5	ug/L ug/L	0.5	1	2/27/2014 00:17	,	A 2/27/2014 00:17	MJA		
1,1,1,2-Tetrachloroethane	<0.5	ug/L ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
1,2,3-Trichloropropane	<0.5	-	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
• •	<0.5 <0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
n-Propylbenzene		ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
p-Isopropyltoluene	<0.5	ug/L			2/27/2014 00:17		A 2/27/2014 00:17	MJA		
2-Chlorotoluene	<0.5	ug/L	0.5	1						
4-Chlorotoluene	<0.5	ug/L	0.5	1 1	2/27/2014 00:17		A 2/27/2014 00:17	MJA MJA		
Hexachlorobutadiene	<0.5	ug/L	0.5		2/27/2014 00:17		X 2/27/2014 00:17			
1,2,3-Trichlorobenzene 1,2-Dibromo-3-	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
chloropropane	<0.02	ug/L	0.02	1	2/27/2014 00:17	WJA	A 2/27/2014 00:17	MJA		
1,3,5-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17	M.JA	A 2/27/2014 00:17	MJA		
Dichlorodifluoromethane	<0.5	ug/L	0.5	1	2/27/2014 00:17		2/27/2014 00:17	MJA		
tert-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
1,2,4-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17		2/27/2014 00:17	MJA		
n-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17		2/27/2014 00:17	MJA		
Bromobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
1,3-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
Dibromomethane	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
Naphthalene	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
Chloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
Bromomethane	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
Vinyl Chloride	<0.5	ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
Isopropylbenzene	<0.5	ug/L ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
Dibromochloromethane	<0.5	ug/L ug/L	0.5	1	2/27/2014 00:17		A 2/27/2014 00:17	MJA		
(THM)	٧٠.٥	ug/L	0.5	1	22112017 00.11	IVIO	C 2/2/1/2017 00.11	IVIOA		
Bromodichloromethane (THM)	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	A 2/27/2014 00:17	MJA		
Chloromethane	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	A 2/27/2014 00:17	MJA		
1,1,2,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	A 2/27/2014 00:17	MJA		
Bromoform (THM)	<0.5	ug/L	0.5	1	2/27/2014 00:17	M.14	A 2/27/2014 00:17	MJA		

Report Date: Friday, March 07, 2014 6:01:34 PM

Report ID: 129777 - 357249

RECEIVED

Page 1 of 2





Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Mike LaBuda

64737

Sample ID: Monroe Residence

Description

Lab ID:

Matrix:

Water

Date Collected:

2/19/2014 14:15

Date Received:

2/21/2014 13:34

Parameters	Results	Units	RDL	DF	Prep	Ву	Analyzed	Ву	Qual	RegLmt
1,3-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,1-Dichloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
sec-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
2,2-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,1-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,1-Dichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
trans 1,2-Dichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
cis 1,2-Dichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,1,1-Trichloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
Carbon tetrachloride	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
Benzene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,2-Dichloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
Trichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,2-Dichloropropane	< 0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
Toluene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
Tetrachloroethylene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,1,2-Trichloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
Chlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
Ethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
m,p-Xylene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
o-Xylene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
Xylene	<1	ug/L	1	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
Styrene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,4-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,2-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,2,4-Trichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:17		2/27/2014 00:17	MJA		
Ethylene Dibromide	< 0.01	ug/L	0.01	1	2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
1,2-Dichlorobenzene-d4 (S)		-			2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
4-Bromofluorobenzene (S)					2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		
Fluorobenzene (S)					2/27/2014 00:17	MJA	2/27/2014 00:17	MJA		

Report Date: Friday, March 07, 2014 6:01:35 PM

Report ID: 129777 - 357249

RECEIVED

MAR 2 0 2014

Page 2 of 2



Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Mike LaBuda

Lab ID: 64739

Description

Sample ID:

Stover Residence 142 N Everyeen Lane

Matrix:

Water

Date Collected:

2/19/2014 16:55

2/21/2014 13:34 Date Received:

RDL DF Parameters Results Units Prep Ву Analyzed Ву Qual RegLmt

Volatiles by EPA 8260							
Analysis Desc: EPA 8260			Prepara	tion Method: EPA 8260			
			Analytic	al Method: EPA 8260			
Trichlorofluoromethane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Chloroform	0.9257	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
MTBE	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Bromochloromethane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
cis-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
trans-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
1,1,1,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
1,2,3-Trichloropropane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
n-Propylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
p-Isopropyltoluene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
2-Chlorotoluene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
4-Chlorotoluene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Hexachlorobutadiene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
1,2,3-Trichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
1,2-Dibromo-3- chloropropane	<0.02	ug/L	0.02	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
1,3,5-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Dichlorodifluoromethane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
tert-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
1,2,4-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
n-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Bromobenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
1,3-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Dibromomethane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Naphthalene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Chloroethane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Bromomethane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Vinyl Chloride	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Isopropylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Dibromochloromethane (THM)	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Bromodichloromethane (THM)	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
Chloromethane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
1,1,2,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA
	<0.5	ug/L	0.5	1	2/27/2014 01:26	MJA 2/27/2014 01:26	MJA

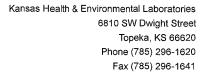
Report Date: Friday, March 07, 2014 6:01:38 PM

Report ID: 129779 - 357262

RECEIVED

MAR 2 0 2014

Page 1 of 3





Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Mike LaBuda

64739

Sample ID: Stover Residence

Description

Lab ID:

Matrix: Water

Date Received:

Date Collected: 2/19/2014 16:55

2/21/2014 13:34

Parameters	Results	Units	RDL	DF	Prep By Analyzed By Qual RegL
1,3-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,1-Dichloroethane	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
sec-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
2,2-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,1-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,1-Dichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
trans 1,2-Dichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
cis 1,2-Dichloroethylene	0.88994	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,1,1-Trichloroethane	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Carbon tetrachloride	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Benzene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,2-Dichloroethane	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Trichloroethylene	1.03064	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,2-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Toluene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Tetrachloroethylene	182.4208	ug/L	10	20	3/4/2014 14:40 MJA 3/4/2014 14:40 MJA
1,1,2-Trichloroethane	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Chlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Ethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
m,p-Xylene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
o-Xylene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Xylene	<1	ug/L	1	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Styrene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,4-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,2-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,2,4-Trichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Ethylene Dibromide	<0.01	ug/L	0.01	1	2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,2-Dichlorobenzene-d4 (S)					2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
1,2-Dichlorobenzene-d4 (S)					3/4/2014 14:40 MJA 3/4/2014 14:40 MJA
4-Bromofluorobenzene (S)					2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
4-Bromofluorobenzene (S)					3/4/2014 14:40 MJA 3/4/2014 14:40 MJA
Fluorobenzene (S)					2/27/2014 01:26 MJA 2/27/2014 01:26 MJA
Fluorobenzene (S)					3/4/2014 14:40 MJA 3/4/2014 14:40 MJA

RECEIVED

MAR 2 0 2014

Page 2 of 3

Report ID: 129779 - 357262

Report Date: Friday, March 07, 2014 6:01:45 PM



Kansas Health & Environmental Laboratories 6810 SW Dwight Street Topeka, KS 66620 Phone (785) 296-1620 Fax (785) 296-1641

ANALYTICAL RESULTS

Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Mike LaBuda

64739

Sample ID: Stover Residence

Description Parameters

Lab ID:

Results

Units

RDL

DF

Prep

Date Received:

Ву

Matrix:

Analyzed

Date Collected:

2/19/2014 16:55

Water

2/21/2014 13:34

Qual RegLmt Ву

Report Date: Friday, March 07, 2014 6:01:46 PM

Report ID: 129779 - 357262

RECEIVED

MAR 2 0 2014

Page 3 of 3



Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Mike LaBuda

64738 Lab ID:

Description

Sample ID:

Anderson Residence 143 N. Evergreen Lance

Matrix:

Water

Date Collected: Date Received: 2/19/2014 16:30 2/21/2014 13:34

Parameters	Results	Units	RDL	DF	Prep	Ву	Analyzed	Ву	Qual RegLmt

Parameters	Results	Units	RDL	DF	Prep	Ву	Analyzed	Ву	Quai RegL
Volatiles by EPA 8260				Control EDA 0000					
Analysis Desc: EPA 8260			Prepara	tion Method: EPA 8260					
			Analytica	al Method: EPA 8260					
Trichlorofluoromethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Chloroform	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
MTBE	1.74121	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Bromochloromethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
cis-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
trans-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
1,1,1,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
1,2,3-Trichloropropane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
n-Propylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
p-Isopropyltoluene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
2-Chlorotoluene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
4-Chlorotoluene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Hexachlorobutadiene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
1,2,3-Trichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJΑ	2/27/2014 00:40	MJA	
1,2-Dibromo-3-	<0.02	ug/L	0.02	1	2/27/2014 00:40	MJΑ	2/27/2014 00:40	MJA	
chloropropane		=							
1,3,5-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40		2/27/2014 00:40	MJA	
Dichlorodifluoromethane	<0.5	ug/L	0.5	1	2/27/2014 00:40		2/27/2014 00:40	MJA	
tert-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40		2/27/2014 00:40	MJA	
1,2,4-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
n-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Bromobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
1,3-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJ₽	2/27/2014 00:40	MJA	
Dibromomethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Naphthalene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Chloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Bromomethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Vinyl Chloride	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJΑ	2/27/2014 00:40	MJA	
Isopropylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Dibromochloromethane (THM)	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Bromodichloromethane (THM)	<0.5	ug/L	0.5	1	2/27/2014 00:40		2/27/2014 00:40	MJA	
Chloromethane	<0.5	ug/L	0.5	1	2/27/2014 00:40		2/27/2014 00:40	MJA	
1,1,2,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA	
Bromoform (THM)	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJ₽	2/27/2014 00:40	MJA	

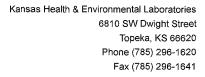
Report Date: Friday, March 07, 2014 6:01:34 PM

Report ID: 129778 - 357260

RECEIVED

MAR 2 0 2014

Page 1 of 3





Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Mike LaBuda

Lab ID: 64738

Sample ID: Anderson Residence

Description

Matrix: Water

Date Collected: 2/19/2014 16:30 Date Received: 2/21/2014 13:34

Parameters	Results	Units	RDL	DF	Prep	Ву	Analyzed	Ву	Qual	Reg	gLmt
1,3-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
1,1-Dichloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
sec-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
2,2-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
1,1-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
1,1-Dichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
trans 1,2-Dichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
cis 1,2-Dichloroethylene	19.02373	ug/L	0.5	1	2/27/2014 00:40	MJΑ	2/27/2014 00:40	MJA			
1,1,1-Trichloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJΑ	2/27/2014 00:40	MJA			
Carbon tetrachloride	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
Benzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
1,2-Dichloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
Trichloroethylene	19.28374	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
1,2-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
Toluene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
Tetrachloroethylene	554.4126	ug/L	10	20	3/4/2014 14:17	MJΑ	3/4/2014 14:17	MJA			
1,1,2-Trichloroethane	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
Chlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
Ethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
m,p-Xylene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
o-Xylene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
Xylene	<1	ug/L	1	1	2/27/2014 00:40	MJΑ	2/27/2014 00:40	MJA			
Styrene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
1,4-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
1,2-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
1,2,4-Trichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
Ethylene Dibromide	<0.01	ug/L	0.01	1	2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
1,2-Dichlorobenzene-d4 (S)		J			2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
1,2-Dichlorobenzene-d4					3/4/2014 14:17	MJA	3/4/2014 14:17	MJA			
4-Bromofluorobenzene (S)					2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
4-Bromofluorobenzene (S)					3/4/2014 14:17	MJA	3/4/2014 14:17	MJA			
Fluorobenzene (S)					2/27/2014 00:40	MJA	2/27/2014 00:40	MJA			
Fluorobenzene (S)					3/4/2014 14:17	MJA	3/4/2014 14:17	MJA			

RECEIVED

MAR 2 0 2014

Page 2 of 3

Report Date: Friday, March 07, 2014 6:01:35 PM



Kansas Health & Environmental Laboratories 6810 SW Dwight Street Topeka, KS 66620 Phone (785) 296-1620 Fax (785) 296-1641

ANALYTICAL RESULTS

Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Ву

Location Desc: Standard Products-West Kellogg

Collector: Mike LaBuda

Lab ID: 64738

Sample ID: **Anderson Residence**

Description **Parameters**

Results

Units

RDL

DF

Prep

Matrix: Date Collected: Water

2/19/2014 16:30 Date Received:

Analyzed

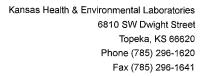
2/21/2014 13:34

Qual RegLmt Ву

RECEIVED

MAR 2 0 20'4

Page 3 of 3





Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Collector: Kyle Parker

Location Desc: C2-087-72515

Lab ID:

67066

Matrix:

Water

Sample ID: 261 N Robin

Date Collected: Date Received: 2/25/2014 13:43

Description Parameters

Results

Units

DF

RDL

Prep

Ву Analyzed 2/26/2014 15:33

Ву

Qual RegLmt

Volatiles by EPA 8260 Analysis Desc: EPA 8260

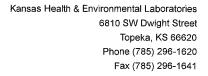
Preparation Method: EPA 8260

Ana	Ivtical	Method:	EPA	8260

Trichlorofluoromethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JΑ
Chloroform	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JΑ
MTBE	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JΑ
Bromochloromethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
cis-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JΑ
trans-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
1,1,1,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
1,2,3-Trichloropropane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
n-Propylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JΑ
p-Isopropyltoluene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JΑ
2-Chlorotoluene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
4-Chlorotoluene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
Hexachlorobutadiene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
1,2,3-Trichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
1,2-Dibromo-3-	<0.02	ug/L	0.02	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
chloropropane	.0.5			4	0/07/004/ 00 00 14/4 0/07/004/ 00 00 14/4	
1,3,5-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
Dichlorodifluoromethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
tert-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
1,2,4-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
n-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
Bromobenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
1,3-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
Dibromomethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
Naphthalene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
Chloroethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
Bromomethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	
Vinyl Chloride	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
Isopropylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
Dibromochloromethane (THM)	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	ΙA
Bromodichloromethane (THM)	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
Chloromethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JΑ
1,1,2,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
Bromoform (THM)	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJ	JA
Report Date: Friday, March	h 07, 2014	6:01:59 PN	Л		RECEIVED	

Report ID: 131740 - 357256

Page 1 of 2



Water

2/25/2014 13:43



ANALYTICAL RESULTS

Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Collector: Kyle Parker

Location Desc: C2-087-72515

Matrix:

Date Collected:

Lab ID: 67066

Sample ID: 261 N Robin

Date Received: 2/26/2014 15:33 Description

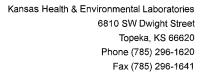
Parameters	Results	Units	RDL	DF	Prep By Analyzed By Qual RegLmt
1,3-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,1-Dichloroethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
sec-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
2,2-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,1-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,1-Dichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
trans 1,2-Dichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
cis 1,2-Dichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,1,1-Trichloroethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Carbon tetrachloride	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Benzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,2-Dichloroethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Trichloroethylene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,2-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Toluene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Tetrachloroethylene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,1,2-Trichloroethane	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Chlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Ethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
m,p-Xylene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
o-Xylene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Xylene	<1	ug/L	1	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Styrene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,4-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,2-Dichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,2,4-Trichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Ethylene Dibromide	<0.01	ug/L	0.01	1	2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
1,2-Dichlorobenzene-d4 (S)		-			2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
4-Bromofluorobenzene (S)					2/27/2014 02:36 MJA 2/27/2014 02:36 MJA
Fluorobenzene (S)					2/27/2014 02:36 MJA 2/27/2014 02:36 MJA

RECEIVED

MAR 2 0 2014

Page 2 of 2

Report Date: Friday, March 07, 2014 6:02:04 PM





Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Kyle Parker

67064 Lab ID: Sample ID:

Nibarger 241 N Rain Rd

Matrix:

Water

Date Collected:

2/25/2014 13:58

Sample ID: Nibarger 231 N Kooja 1944						Date Collected: 2/25/2014 13:58				
Description Date Received: 2/26/2014 15										33
Parameters	Results	Units	RDL	DF	Prep	Ву	Analyzed	Ву	Qual	RegLm
Volatiles by EPA 8260										
Analysis Desc: EPA 8260			Prepara	tion Method: EPA 8260						
			Analytic	al Method: EPA 8260						
Trichlorofluoromethane	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
Chloroform	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
MTBE	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
Bromochloromethane	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
cis-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50	MJA		
trans-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
1,1,1,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 01:50		2/27/2014 01:50			
1,2,3-Trichloropropane	<0.5	ug/L	0.5	1	2/27/2014 01:50		2/27/2014 01:50			
n-Propylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50	MJA		
p-Isopropyltoluene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJΑ	2/27/2014 01:50) MJA		
2-Chlorotoluene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50			
4-Chlorotoluene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
Hexachlorobutadiene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
1,2,3-Trichlorobenzene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
1,2-Dibromo-3- chloropropane	<0.02	ug/L	0.02	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
1,3,5-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
Dichlorodifluoromethane	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
tert-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
1,2,4-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
n-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50	MJA		
Bromobenzene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
1,3-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
Dibromomethane	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
Naphthalene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50	MJA		
Chloroethane	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50	MJA		
Bromomethane	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	A 2/27/2014 01:50	MJA		
Vinyl Chloride	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	A 2/27/2014 01:50) MJA		
Isopropylbenzene	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50	MJA		
Dibromochloromethane (THM)	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50) MJA		
Bromodichloromethane (THM)	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	A 2/27/2014 01:50) MJA		
Chloromethane	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50	MJA		
1,1,2,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	A 2/27/2014 01:50	MJA		
Bromoform (THM)	<0.5	ug/L	0.5	1	2/27/2014 01:50	MJA	2/27/2014 01:50	MJA		
Penort Date: Friday Marc		ŭ					RECEIVE			

Report Date: Friday, March 07, 2014 6:01:49 PM

Report ID: 131738 - 357252

HEUEIVED

Page 1 of 2

MAR 2 0 2014





Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Kyle Parker

67064

Sample ID: Nibarger

Description

Lab ID:

Matrix: Water

Date Received:

2/26/2014 15:33

Date Collected: 2/25/2014 13:58

Parameters Results Units **RDL** DF Prep Ву Analyzed Ву Qual RegLmt 1,3-Dichlorobenzene < 0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA 1.1-Dichloroethane <0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA sec-Butylbenzene < 0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA < 0.5 0.5 2/27/2014 01:50 MJA 2/27/2014 01:50 2,2-Dichloropropane ug/L 1 M.IA 1,1-Dichloropropene < 0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 M.JA 1,1-Dichloroethylene <0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA trans 1,2-Dichloroethylene < 0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA cis 1,2-Dichloroethylene <0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA 1,1,1-Trichloroethane < 0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA Carbon tetrachloride < 0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA Benzene <0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA 1,2-Dichloroethane <0.5 ua/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA Trichloroethylene <0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA 1,2-Dichloropropane < 0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA <0.5 ug/L 0.5 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA Toluene 1 8.03489 0.5 Tetrachloroethylene ug/L 2/27/2014 01:50 MJA 2/27/2014 01:50 M.IA 1 2/27/2014 01:50 <0.5 ug/L 0.5 1,1,2-Trichloroethane 1 MJA 2/27/2014 01:50 MJA Chlorobenzene < 0.5 ug/L 0.5 2/27/2014 01:50 MJA 2/27/2014 01:50 1 MJA <0.5 0.5 Ethylbenzene ug/L 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA m,p-Xylene <0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA o-Xylene <0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA **Xylene** <1 ug/L 1 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA <0.5 0.5 2/27/2014 01:50 Styrene ug/L 1 MJA 2/27/2014 01:50 M.JA 1.4-Dichlorobenzene < 0.5 ug/L 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA ug/L 1,2-Dichlorobenzene <0.5 0.5 1 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA 2/27/2014 01:50 1,2,4-Trichlorobenzene < 0.5 ug/L 0.5 1 MJA 2/27/2014 01:50 MJA Ethylene Dibromide <0.01 0.01 2/27/2014 01:50 ug/L 1 MJA 2/27/2014 01:50 M.JA 1.2-Dichlorobenzene-d4 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA 4-Bromofluorobenzene (S) 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA Fluorobenzene (S) 2/27/2014 01:50 MJA 2/27/2014 01:50 MJA

RECEIVED

MAR 2 0 2014

Page 2 of 2



Kansas Health & Environmental Laboratories
6810 SW Dwight Street
Topeka, KS 66620
Phone (785) 296-1620
Fax (785) 296-1641

ANALYTICAL RESULTS

Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Kyle Parker

67065

Sample ID: Description

Lab ID:

Brown 215 5, Socota

Matrix:

Water

Date Collected: 2/25/2014 14:17

Date Received:

2/26/2014 15:33

Parameters	Results	Units	RDL	DF	Prep	Ву	Analyzed	Ву	Qual	RegLm
Volatiles by EPA 8260									-	
Analysis Desc: EPA 8260			Prepara	tion Method: EPA 8260						
4 1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Analytic	al Method: EPA 8260						
Trichlorofluoromethane	<0.5	ug/L	0.5	1	2/27/2014 02:13	ΜΙΔ	2/27/2014 02:13	MJA		
Chloroform	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
MTBE	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
Bromochloromethane	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
cis-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
trans-1,3-Dichloropropene	<0.5	ug/L	0.5	1	2/27/2014 02:10		2/27/2014 02:13	MJA		
1,1,1,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
1,2,3-Trichloropropane	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
n-Propylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
p-isopropyltoluene	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
2-Chlorotoluene	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
4-Chlorotoluene	<0.5 <0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
Hexachlorobutadiene	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
1,2,3-Trichlorobenzene	<0.5	ug/L ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
1,2-Dibromo-3-	<0.02	ug/L ug/L	0.02	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
chloropropane	\0.02	ug/L	0.02	ı	2/2//2014 02.13	IVIO	2/2//2014 02.13	IVIJA		
1,3,5-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Dichlorodifluoromethane	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	MJA		
tert-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,2,4-Trimethylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	MJA		
n-Butylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Bromobenzene	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,3-Dichloropropane	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
Dibromomethane	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Naphthalene	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
Chloroethane	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
Bromomethane	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
Vinyl Chloride	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
Isopropylbenzene	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
Dibromochloromethane	<0.5	ug/L	0.5	1	2/27/2014 02:13		2/27/2014 02:13	MJA		
(THM)	0.5	~g· =		·						
Bromodichloromethane (THM)	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Chloromethane	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,1,2,2-Tetrachloroethane	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Bromoform (THM)	<0.5	ug/L	0.5	1	2/27/2014 02:13	MJA	2/27/2014 02:13	ΜΙΔ		

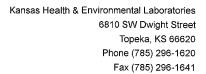
Report Date: Friday, March 07, 2014 6:01:52 PM

Report ID: 131739 - 357254

MAR 2 0 2014

Page 1 of 2







ANALYTICAL RESULTS

Submitter: BER Remedial Section

Report to: Rick Bean

BER Remedial Section 1000 SW Jackson Suite 410

Topeka, KS 66612

Client ID: BER001

State ID:

Location Code: C2-087-72515

Location Desc: Standard Products-West Kellogg

Collector: Kyle Parker

Lab ID:

Description

67065

Sample ID:

Brown

Matrix:

Water

Date Collected: Date Received: 2/25/2014 14:17 2/26/2014 15:33

Parameters	Results	Units	RDL	DF	Pr	ер	Ву	Analyzed	Ву	Qual	RegLmt
1,3-Dichlorobenzene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,1-Dichloroethane	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
sec-Butylbenzene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
2,2-Dichloropropane	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,1-Dichloropropene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,1-Dichloroethylene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
trans 1,2-Dichloroethylene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
cis 1,2-Dichloroethylene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,1,1-Trichloroethane	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Carbon tetrachloride	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Benzene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,2-Dichloroethane	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Trichloroethylene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,2-Dichloropropane	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Toluene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Tetrachloroethylene	1.52776	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,1,2-Trichloroethane	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Chlorobenzene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Ethylbenzene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
m,p-Xylene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
o-Xylene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Xylene	<1	ug/L	1	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Styrene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,4-Dichlorobenzene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,2-Dichlorobenzene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,2,4-Trichlorobenzene	<0.5	ug/L	0.5	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Ethylene Dibromide	<0.01	ug/L	0.01	1	2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
1,2-Dichlorobenzene-d4 (S)					2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
4-Bromofluorobenzene (S)					2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		
Fluorobenzene (S)					2/2	27/2014 02:13	MJA	2/27/2014 02:13	MJA		

RECEIVED

MAR 2 0 2014

Page 2 of 2

9.4 Field Notes

Standard Products/West Kellogg Site

Address	Not Home	No Well	Has Well	Comments	Address	Not Home	No Well	Has Well	Comments
220 S Evergreen Court	V		1/	486	8227 W Maple St	1			
224 S Evergreen Court	V			Possible Hise	8306 W Maple St	7			,
228 S Evergreen Court	/				160 N Robin Rd	V			
100 S Evergreen Lane	V,		1	: : : : : : : : : : : : : : : : : : :	212 N Robin Rd	V			
110 S Evergreen Lane	V		/		227 N Robin Rd	/		Name.	
115 N Evergreen Lane	1				228 N Robin Rd	B			
116 N Evergreen Lane	V				241 N Robin Rd	V			
126 S Evergreen Lane			V	Read 15	242 N Robin Rd	V		HEIN	
127 N Evergreen Lane					260 N Robin Rd	/		/	
128 N Evergreen Lane	Abria	rdon	ed		261 N Robin Rd			V	2 wells 18
140 S Evergreen Lane	/				325 S Socoa Dr	1			
142 N Evergreen Lane	re-ti-		1	Sample	103 S Socora Dr	V		V	2 on those
143 N Evergreen Lane	MINE IN		V	Sampled	109 S Socora Dr	/	THE RES		1 2 10
, 156 S Evergreen Lane			V	7 wedly to	111 N Socora Dr	V			
157 N Evergreen Lane	TV	100		//	135 S Socora Dr	V		1	
158 N Evergreen Lane	V		Carlo II al		155 S Socora Dr	NGa.	E.		
200 N Evergreen Lane			THE S		207 S Socora Dr	. P. S.	V		
201 N Evergreen Lane	1/			Parmission Hall	215 S Socora Dr		2		would no
221 N Evergreen Lane	1			Carrier Const	233 S Socora Dr				aurum,
222 N Evergreen Lane	1				320 S Socora Dr	/		State of	
241 N Evergreen Lane	/				330 S Socora Dr	1			
259 N Evergreen Lane	1				340 S Socora Dr	1	7 7 7 7		
321 S Floyd St			1.	peclines	400 S Topaz Lane				×.
337 S Floyd St			1/	Ante garn	401 S Topaz Lane	1			
352 S Floyd St	/				420 S Topaz Lane	1			
355 S Floyd St	./				357 N Tyler Rd	the	V		
364 S Floyd St			V	LE6	403 N Tyler Rd	1			
365 S Floyd St			/	286	415 N Tyler Rd	/		3035	
371 S Floyd St			/	136	427 N Tyler Rd	1			Ų .
374 S Floyd St			1/	136	531 N Tyler Rd	11			
384 S Floyd St	1			~60	535 N Tyler Rd	1			
400 S Floyd St	1		V	166	545 N Tyler Rd	V	/	A PARTIE	· ·
8101 W Maple St	1			2.	8020 W University Ave	V			
8116 W Maple St	1	/			365 S Woodchuck Lane	1/1			
8123 W Maple St	V				369 S Woodchuck Lane	1			3
8201 W Maple St	1				375 S Woodchuck Lane	1			
8212 W Maple St	/				411 S Woodchuck Lane	/			511
8220 W Maple St	1				525 S Woodchuck Lane				211
Notes:				10-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	525 5 Troodollatik Ealle				

Notes:

Most of Second W. of Maple ? Evergreen not on ally water
and have wells in front yard

N. Robin - could see no wells
N. Typer - could see no wells

2/19/19 Glen Anderson · 143 N. Evergreen Lane Wichita, KD 67212 · Sample collected 1630 his from outside finest Well supplies bouse but is put thru water softening susten system George Stover 142 N. Evergreen Lane Widnita Ks 57212 Sample collected 1655 from outside faucet or N. Nide of house. Supplies whole house. (Having whole house filtration installed tomorrow (2/20/14) Talked to Trey Tugg, assistant principal of Willes Middle School. He saw no reason we could not 2/20/14 probe in N.W. Corner area. He will talk to Principal Toldhim we would be down in Mar. or April and will contact him.

Photo 1 - Maple : Secona facing West - Note electric boxes
2 - 11 i " " East on less 3 - Looking N from A. Rolin - Inters. N. Rohin - 2nd 4 - Lookin E " Lookin E 2nd 20% S. Seon - owner - Tall 25tory east scole-100 N. Wroft From Jonge 131 N. Secora - Monroe Residence. Stated entire blk north of Maple, with exception of 15th several houses, were on wells. No city water. I voc collected at 1415 hrs from outside fauret on south side of fouse 156 5. Evergreen - 2 wells - Schwarty Residence 8947 Central is now a Dollar General Store

CA-081-72515

Division of Environment Curtis State Office Building 1000 SW Jackson St., Suite 400 Topeka, KS 66612-1367



Phone: 785-296-1535 Fax: 785-296-8464 www.kdheks.gov

Robert Moser, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

April 24, 2014

Mr. Paul Roemerman U.S. EPA Region VII, Superfund Division 11201 Renner Boulevard Lenexa, Kansas 66219

RE: Preliminary Assessment and QuickScore for the Standard Products/West Kellogg Site, Wichita,

Sedgwick County, Kansas KDHE I.D. # C2-087-72515 EPA I.D. # KSN000706571

Dear Mr. Roemerman:

The Kansas of Department of Health and Environment (KDHE) has completed the Preliminary Assessment (PA) of the Standard Products/West Kellogg site in Wichita, Sedgwick County, Kansas. Since multiple domestic wells were identified in the PA with tetrachloroethylene (PCE) above Maximum Contaminant Levels, KDHE has already initiated the Site Inspection (SI) to further identify potentially impacted domestic wells, identify a PCE source area, and evaluate response options. At this time KDHE is recommending the PA be entered with a high-priority qualifier for the SI. If you have any questions, please feel free to contact me at (785) 296-8065.

Sincerely,

Randolph L. Brown, P.G.

Unit Chief, Site Assessment Unit

Remedial Section

Bureau of Environmental Remediation

rlb/Attachments

c: Jon Vopata -> Site File -> C2-087-72515

Site Decision Files

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION 7

SITE NAME: Standard Products/West Kellogg KDHE ID #: <u>C2-087-72515</u> EPA ID#: KSN000706571

Alias/Alternate Site Names:

City: Washington County: Sedgwick State: Kansas

Refer to Report Dated: March, 2014 Report type: Preliminary Assessment (PA)

Report developed by: Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER)

Project Manager: Jon Vopata, KDHE/BER

DECISION: The PA has identified several domestic wells with tetrachloroethylene (PCE) above Maximum Contaminant Levels (MCLs). A higher-priority Site Inspection (SI) is recommended to further identify additional domestic wells that may be impacted and a source area for the contamination.

DISCUSSION/RATIONALE: The Standard Products property is located at 7920 West Kellogg in Wichita, Sedgwick County, Kansas. Standard Products historically operated at multiple sites in Wichita, and of these two have documented radium-226 contamination. Three Standard Product properties were investigated by KDHE through Unified Focused Assessments (UFAs). National Cash Register (NCR) was a parent company of Standard Products and operated at the West Kellogg location between 1970 and 1998. The West Kellogg facility does not appear to have held a Kansas Radioactive Materials License. Soil samples collected during the UFA at the West Kellogg property, approved by KDHE in January, 2010, indicated no elevated levels of heavy metals above residential RSK levels or radium-226 above the screening level of 5 picoCuries per gram plus background in soils or the screening level of 5 picoCuries per liter for groundwater samples. PCE was detected in all three groundwater samples at concentrations ranging between 1.8 and 8.1 µg/L. The maximum detection of 8.1 µg/L was identified in sample SP-2, assumed to be on the upgradient side of the property.

The UFA portion of the State Response Grant was eliminated in 2010-2011. KDHE reviewed completed UFAs to determine if additional site assessment was appropriate, and in 2013 KDHE conducted a Site Evaluation (SE) of the Standard Products/West Kellogg site. During the SE, an additional seven direct-push groundwater samples were collected in the assumed upgradient direction from the Standard Products/West Kellogg property investigated during the UFA. PCE was detected at a maximum concentration of 7.4 µg/L, above its MCL, in SE-5 approximately 1,500 feet upgradient of the UFA SP-2 sample location. This sample location is within a residential area with no apparent source area for PCE nearby. A PA was recommended upon completion of the SE.

During the PA, a door-to-door search was conducted upon identifying an area in January 2014 that had apparently not been historically connected to the City of Wichita Public Water Supply. Six domestic wells were sampled in February, 2014. Three of these wells, Anderson, Stover, and Nibarger, indicated PCE above the MCL. Three of these wells, the Monroe, Emprise Bank Trust, and Brown wells, did not indicate PCE above the MCL. The maximum detection was 554 µg/L in the Anderson well.

Since multiple domestic wells have been identified as impacted above the MCL for PCE, a higher-priority SI is recommended to identify additional potentially impacted domestic wells, determine a source area, and evaluate other KDHE or Federal programmatic options for the impacted domestic wells.

Report Reviewed and Approved by: Randolph L. Brown, P.G., KDHE/BER		681	
Approved by: Randolph L. Brown, P.G., KDHE/BER	_ Signature: _	19/2	Date: 03/24/2014

Site Decision Concurrence

Made by: Paul Roemerman, Kansas SAM, EPA Signature: Date:

PRELIMINARY ASSESSMENT (PA) CHECKLIST

This checklist can be used to help determine if additional response beyond the PA is warranted. This checklist should summarize the rationale for the decision if additional assessment or response is required under CERCLA. Use additional sheets, if necessary.

Checklist Pre	parer:	Jon Vopata / Environmental Scientist	4/24/14	
		Name/Title	Date	
		1000 SW Jackson Suite 410 Topeka, Kansas 66612	785-296-8063	
		Address	Phone	
		Jvopata@kdheks.gov	CONTRACTOR OF THE CONTRACTOR O	
		E-Mail Address		
Site Name an	d CERCLIS I.D.:	Standard Products/West Kellogg KSN000706571		
Previous Nan	nes or Alias:			
State I.D.:		C2-087-72515		
Site Location	:	7920 W Kellogg Avenue, Wichita, Kansas 67209		
Latitude:	37.673344	Longitude: -97.4337	51	
Describe the	release (or potenti	al release) and its probable nature: Tetrachloroethylene (PCE) was detected in three pri	vate
deinking water	r walls at concentrat	tions avanading KDUE Tion 2 DCK levels and MCI a Trichl	aranthulana (TCE) was datast	ad in two

Describe the release (or potential release) and its probable nature: Tetrachloroethylene (PCE) was detected in three private drinking water wells at concentrations exceeding KDHE Tier 2 RSK levels and MCLs. Trichloroethylene (TCE) was detected in two private drinking water wells at concentrations exceeding KDHE Tier 2 RSK levels and MCLs. Residential properties in the vicinity of the site rely on domestic wells for drinking water. It is likely there are additional drinking water wells impacted with PCE and/or TCE. The source of contamination was not identified during the PA.

Part 1 - Superfund Eligibility Evaluation	YES	NO
1. Is the site currently in CERCLIS or an "alias" of another site?	X	
2. Is the site being addressed by some other remedial program (Federal, State, or Tribal)?		х
3. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (e.g., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?		X
4. Are the hazardous substances potentially released at the site excluded by policy considerations (i.e., deferred to RCRA corrective action)?		х
5. Is there sufficient documentation to demonstrate that no potential for a release that could cause adverse environmental or human health impacts exists (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, previous HRS score determined, or an EPA approved risk assessment completed)?		х

Please explain all "yes" answer(s). The site is currently in CERCLIS.

**** CONFIDENTIAL **** ****PRE-DECISIONAL DOCUMENT **** **** SUMMARY SCORESHEET **** **** FOR COMPUTING PROJECTED HRS SCORE ****

**** Do Not Cite or Quote ****

Site Name: Standard Products/West Kellogg Region: Region 7

Scenario Name: Preliminary Assessment

City, County, State: Wichita/Sedgwick, Evaluator: Jon Vopata

Kansas

EPA ID#: KSN000706571 Date: 03/07/2014

Lat/Long: 37:40:24,-97:26:2

Congressional District: 4

This Scoresheet is for: PA

Scenario Name: Preliminary Assessment

Description:

	S pathway	S ² pathway
Ground Water Migration Pathway Score (Sgw)	100.0	10000.0
Surface Water Migration Pathway Score (S _{sw})	0.0	0.0
Soil Exposure Pathway Score (S _s)	0.0	0.0
Air Migration Score (S _a)	0.0	0.0
$S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2$		10000.0
$(S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2)/4$		2500.0
$/(S_{gw}^2 + S_{sw}^2 + S_{s}^2 + S_{a}^2)/4$		50.0

Pathways not assigned a score (explain):

Table 3-1 Ground Water Migration Pathwa			
Factor categories and factors	Maximum Value	Value A	ssigned
Aquifer Evaluated: Alluvial Aquifer			
Likelihood of Release to an Aquifer:	FF 0	550.0	
1. Observed Release	550	550.0	
2. Potential to Release:		0.0	
2a. Containment	10	0.0	
2b. Net Precipitation	10	0.0	
2c. Depth to Aquifer	5	1.0	
2d. Travel Time	35	1.0	
2e. Potential to Release [lines 2a(2b + 2c + 2d)]	500	0.0	
3. Likelihood of Release (higher of lines 1 and 2e)	550		550.0
Waste Characteristics:			
4. Toxicity/Mobility	(a)	1000.0	
5. Hazardous Waste Quantity	(a)	1000000.0	
6. Waste Characteristics	100		100.0
Targets:			
7. Nearest Well	(b)	50.0	
8. Population:			
8a. Level I Concentrations	(b)	100.0	
8b. Level II Concentrations	(b)	4.0	
8c. Potential Contamination	(b)	573.6	
8d. Population (lines 8a + 8b + 8c)	(b)	677.6	
9. Resources	5	5.0	
10. Wellhead Protection Area	20	0.0	
11. Targets (lines 7 + 8d + 9 + 10)	(b)		732.6
Ground Water Migration Score for an Aquifer:	` '		
12. Aquifer Score [(lines 3 x 6 x 11)/82,5000] ^c	100		100.0
.2. / Name: Coole [(IIIIOO O / O / 1 / //OZ,0000]	100		
Ground Water Migration Pathway Score:	100		0.0
13. Pathway Score (S _{gw}), (highest value from line 12 for all aquifers evaluated) ^c	100		0.0

 ^a Maximum value applies to waste characteristics category
 ^b Maximum value not applicable
 ^c Do not round to nearest integer

Factor categories and factors	Maximum Value	Value	Assigned
Likelihood of Exposure:			<u> </u>
1. Likelihood of Exposure	550		
Waste Characteristics:			
2. Toxicity	(a)	0.0	
3. Hazardous Waste Quantity	(a)		
4. Waste Characteristics	100		0.0
Targets:			
5. Resident Individual	50		
6. Resident Population:			
6a. Level I Concentrations	(b)	0	
6b. Level II Concentrations	(b)		
6c. Population (lines 6a + 6b)	(b)		
7. Workers	15	0.0	
8. Resources	5		
9. Terrestrial Sensitive Environments	(c)		
10. Targets (lines 5 + 6c + 7 + 8 + 9)	(b)		0.0
Resident Population Threat Score			
11. Resident Population Threat Score (lines 1 x 4 x 10)	(b)		0.0
Nearby Population Threat			
Likelihood of Exposure:			
12. Attractiveness/Accessibility	100	0.0	
13. Area of Contamination	100	5.0	
14. Likelihood of Exposure	500		0.0
Waste Characteristics:			
15. Toxicity	(a)	0.0	
16. Hazardous Waste Quantity	(a)	0.0	
17. Waste Characteristics	100		0.0
Targets:			
18. Nearby Individual	1	0.0	
19. Population Within 1 Mile	(b)		
20. Targets (lines 18 + 19)	(b)		
Nearby Population Threat Score			
21. Nearby Population Threat (lines 14 x 17 x 20)	(b)		0.0
Soil Exposure Pathway Score:			
22. Pathway Score ^d (S _s), [lines (11+21)/82,500, subject to max of 100]	100		0.0

^a Maximum value applies to waste characteristics category
^b Maximum value not applicable
^c No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60
^d Do not round to nearest integer

Table 6-1 Air Migratio	N PATHWAY SCORESHEET	
Factor categories and factors	Maximum Value	Value Assigned
Likelihood of Release:		
1. Observed Release	550	
2. Potential to Release:		
2a. Gas Potential to Release	500	
2b. Particulate Potential to Release	500	
2c. Potential to Release (higher of lines 2a and 2b)	500	
3. Likelihood of Release (higher of lines 1 and 2c)	550	
Waste Characteristics:		
4. Toxicity/Mobility	(a)	
5. Hazardous Waste Quantity	(a)	
6. Waste Characteristics	100	
Targets:		
7. Nearest Individual	50	
8. Population:		
8a. Level I Concentrations	(b)	
8b. Level II Concentrations	(b)	
8c. Potential Contamination	(c)	
8d. Population (lines 8a + 8b + 8c)	(b)	
9. Resources	5	
10. Sensitive Environments:		
10a. Actual Contamination	(c)	
10b. Potential Contamination	(c)	
10c. Sensitive Environments (lines 10a + 10b)	(c)	
11. Targets (lines 7 + 8d + 9 + 10c)	(b)	
Air Migration Pathway Score:		
12. Pathway Score (S _a) [(lines 3 x 6 x 11)/82,500] ^d	100	

^a Maximum value applies to waste characteristics category
^b Maximum value not applicable
^cNo specific maximum value applies to factor. However, pathway score based solely on sensitive environments is limited to a maximum of 60.
^d Do not round to nearest integer